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Notes on Bigot's North American type-specimens at the University Museum, Oxford

(Diptera: Anthomyiidae, Muscidae)

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Bigot (1885, 1886, 1887) in his descriptive work on new or little known species of Diptera included several that were recorded from North America and that occur in the neighboring region of Mexico. This material, with its type-specimens, has been in the possession of the Verrall Collection at Newmarket, at which time it was reviewed by Stein (1907) along with other exotic taxa. Recently that part of the Bigot material containing anthomyiid and muscid forms, with the exception of three nominal species (vide infra), has been donated by the late Mr. J. E. Collin, in whose custody the Verrall Collection had remained, to the Hope Department of Entomology at the University Museum, Oxford, along with his own extensive collection of British Diptera.

Through the curtesy of Professor G. C. Varley and the staff at the Hope Department of Entomology I was given access to the collections for the purpose of studying the types of Bigot's North American species belonging to the families Anthomyiidae and Muscidae, and was provided with the necessary facilities for their examination. To Mr. D. M. Ackland I am particularly indebted for assistance in guiding me to the various sections of the collection related to my current work, and for drawing my attention to the questionable status of Nemopoda obscuripennis Bigot, classed with the Acalyptratae.

The types of Bigot's species have been transferred to separate trays headed by the large original dark-edged label, on which the specific name is written in a large formalized hand. Beneath the name and to the left is written in smaller lettering the locality, e. g. "Am. Sept. (Mt. Roche)," and to the right "J. Bigot."

The type-specimens, with few exceptions as duly noted, possess a label attached to their pins, on which the name of the species is repeated in

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ink in Collin's handwriting, followed by "EX COLL. BIG." in large print.

I have noted various discrepancies in the labelling of species and with earlier records concerning the spelling of names, the sex cited, and in the number of specimens present, for sake of avoiding ambiguity or error.

The Bigot names are listed in alphabetical order accompanied by a reference to their publication date and page.

anthracina, Anthomyia. (1885, p. 298). 23, 49, from the Rocky Mountains, all as treated by Ackland (1968) and belonging to the type series, of which one female remains undetermined. The named specimens are identical with *Calythea separata* Malloch.

anthrax, Limnophora. (1885, p. 274). 13, from Mexico. The male is notable for the brown calyptrae. The species belongs to the genus Spilogona Schnabl.

argentina, Ophyra. (1885, p. 302). 1, from Buenos Ayres, agrees in all particulars with females of Ophyra aenescens (Wiedemann), as has been corroborated by studies of Oliveira (1941).

calopus, H.?. (1885, p. 275). 1 $^{\circ}$, from Mexico, and named in writing H. calopoda on Bigot's type label, to which is added "Type" in Collin's handwriting. Stein (1907, p. 215) gives the genus as Hydrophoria, in compliance with the context. The specimen is conspecific with Bithoracochaeta leucoprocta (Wiedemann).

dentata, Homalomyia. (1885, p. 284). 13, from the Rocky Mountains, agreeing in all respects with males of Limnophora narona (Walker).

flavicaudata, Hylemyia. (1885, p. 299). 1 \circ , from Washington Territory, having the name H. flavicauda written on Bigot's type label. The specimen in conspecific with Hylemya alcathoe (Walker).

fulviventris, Spilogaster. (1885, p. 291). 18, from California, a variant of the species Helina tröene (Walker), having the thorax gray, with humerals and scutellum partly reddish tinged, abdomen mainly fulvous and with two pairs of weak spots.

fulvus, Spilogaster. (1885, p. 289). 18, from Washington Territory, having abdomen, one hind leg and much of one wing missing. The type specimen has head, thorax and legs fulvous, thus markedly differing from associated species within Hebecnema Schnabl.

mexicana, Homalomyia. (1885, p. 284). 3¢, from Mexico, all conspecific, and may be recognized readily as belonging to the species Fannia canicularis (Linnaeus).

monticola, Anthomyia. (1885, p. 297). 68, 29, from the Rocky

Mountains, all as treated by Ackland (1968) and belonging to the type series, of which one female is recognized as *Delia platura* (Meigen). As noted by Ackland, the species *monticola* and *anthracina* of Bigot are conspecific, hence the name *monticola*, due to claims of page precedence, may be accepted as the valid name for the species. Both taxa are identical with *Calythea separata* Malloch.

nigricauda, Hydrophoria. (1885, p. 276). 26, from the Rocky Mountains, one of which has lost its antennae. Both specimens have basal segments of abdomen reddish testaceous, and the tubular haustellum together with the slender labellum one and a half times as long as height of head, thereby differing from its congeners Neohylemyia tenuirostris (van der Wulp) and N. mallochi Huckett, that have a shorter haustellum and a uniformly gray abdomen. The calyptrae and wings of the type specimens of N. nigricauda possess a brownish tinge. The species belongs to the genus Neohylemyia Malloch.

obscuripennis, Nemopoda. (1886, p. 392). 19, from California, with the name N. obcuripennis written on Bigot's type label, and the sex cited as a male in the description. The type specimen is in poor condition, owing chiefly to the covering of much of the abdomen in a pinkish mold. The remaining parts except the forelegs that are missing can with due care be perceptible, and indicate clearly that the specimen is a female and is conspecific with Chelisia elegans Stein, N. SYN.

oculifera, Anthomyia. (1885, p. 299). 1¢, from Baltimore. The dark brown marks on the whitish mesonotum are striking and may be described in some detail. The longish oblong presutural marks becloud the planes of dorsocentral bristles, extending to anterior border of mesonotum and ending caudad shortly before reaching the transverse suture: on postsutural region a band or fascia adjoining the transverse suture that medially encroaches as a slight wedge between the caudal pair of presutural acrosticals, laterad the fascia extends to prealar bristles, and caudad to the third pair of postsutural dorsocentrals, from thence as a tongue to base of wings. Scutellum entirely black on dorsum. A chitinous fold or lobe extends distinctly mesad beyond apex of each process on fifth abdominal sternum.

rubifrons, Anthomyia. (1885, p. 297). 39, from Chile, with the name written A. rubrifrons on Bigot's type label. The specimens closely resemble the female of Delia platura (Meigen), from which I disassociate them owing to the presence of two anterior sternopleural bristles. Collin (in letter, 28 March 1951) has indicated that these specimens are in all probability females of the male A. sancti-jacobi described by Bigot on the previous page (1885, p. 296), and that all had arrived in the

same lot from Chile. Stein (1907, p. 285) denoted the species under the name *Chortophila cilicrura* Rondani.

rupecula, Homalomyia. (1885, p. 285). 28, from the Rocky Mountains, agreeing in all particulars with the male of Delia platura (Meigen). The name is written H. rupicola on Bigot's type label.

siphonina, Proboscidomyia. (1885, p. 267). 25, from the Rocky Mountains, that are without the usual Collin label attached to pines of type specimens. The males possess an extremely long slender tubular proboscis and minutely haired arista, otherwise, in habitus, resembling the species of Neohylemyia Malloch.

spinipes, Chortophila. (1885, p. 279). 19, from the Rocky Mountains, agreeing closely with the female of *Delia platura* (Meigen), and with which I regard it to be conspecific. The description of the species accords the sex to be a male.

To Mr. A. C. Pont of the British Museum I am indebted for information concerning three nominal species from the Rocky Mountains that Bigot (1887) described in a later contribution, the types of which are deposited in the British Museum (Natural History). Two of these taxa have recently been commented on by Pont (1970) in an article dealing with the European species of *Myospila* Rondani.

anthomydea, Curtonevra. (1887, p. 614). 13, with midlegs missing, is conspecific with Myospila meditabunda (Fabricius) of authors.

nigriceps, Curtonevra. (1887, p. 615). 36, the antennae and midlegs lacking in one specimen, one mid and one hind leg missing in the two others, all conspecific and agreeing with Myospila meditabunda (Fabricius) of authors.

flavipennis, Musca. (1887, p. 605). 13, 19, both in poor condition, but clearly recognizable as belonging to Musca domestica Linnaeus. The female is without a locality label.

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BOOK NOTICE

CATALOGUE OF THE THYSANOPTERA OF THE WORLD (PART 1). By C. F. Jacot-Guillarmod. 20 February 1970. Annals of the Cape Provincial Museums, Natural History, vol. 7, pt. 1. Pp. iii + 216 (numbered pages 217 and 218 are blank pages). Soft cover. R5.00 (about US\$ 7.00).

In November 1970 Dr. Howell V. Daly, Jr., mailed from Grahamstown, a copy of Mr. Jacot-Guillarmod's catalog for review in the Pan-Pacific Entomologist. It is a pleasure to do so, for this is an important work that is well done. This first volume of a projected monumental work of possibly six or more parts when completed, is dedicated to Dr. J. C. Faure, under whose guidance it was started some 30 years ago. It begins (pp. i-iii) with a brief introduction including "Scope and Method." The general classification followed is that of Priesner with slight modification. Part one covers the suborder Terebrantia families Aeolothripidae, Mesothripidae, Paleothripidae, Permothripidae, Merothripidae, Heterothripidae, and Uzelothripidae. Fifty genera (24 are monotypic) and 339 valid species are cataloged. Both fossil and recent species are included. For each valid name, the original description and all subsequent publications are cited; for each genus the type species is cited; for each species the location of type, distribution, type locality, and habitat are cited; invalid names are cross-indexed. This publication, in this economically important order, should have an extensive use.—Paul H. Arnaud, Jr., California Academy of Sciences, San Francisco, 94118.